# ADDENDUM TO THE SOUTH CAROLINA STATE TECHNOLOGY PLAN

#### 05/08/02

I. Long term strategies for improving student academic achievement, through the effective use of technology in the classroom and the capacity of teachers to integrate technology effectively into curricula and instruction.

Through the careful revision of the South Carolina State Technology Plan, the State Department of Education will ensure that educators and communities have the capacity to translate the long-range technology vision for student achievement and technology literacy into compelling, meaningful learning activities for children and adults.

The South Carolina State Department of Education will ensure that connectivity in each district is adequate to support rapidly growing demands created by the learning, communication and administrative requirements of the education system.

All South Carolina students will be provided with the resources and instruction to develop skills and competencies necessary to use technology tools to communicate effectively, achieve high academic standards and develop a level of technology literacy to actively participate in a swiftly changing information-based society.

Through professional development initiatives, monitoring, technology leadership courses for administrators and requirements of the Teacher Technology Proficiency Proviso, all educators will acquire technology literacy and apply effective, research-based, technology integration strategies to support South Carolina learning standards across the curriculum.

Through local technology plans, modeled after the state plan, all districts will develop and implement policies and practices to effectively, equitably and efficiently integrate technology as a tool to improve academic achievement, streamline administrative functions, facilitate virtual communications, and enhance teacher technology proficiency.

All South Carolina public school buildings will be linked to the State library system (DISCUS), universities, museums and other

educational institutions to enable educators, parents and students to access a wide range of technology resources.

All South Carolina districts will use administrative technologies for data driven decision making. Schools will collect student data to diagnose and analyze student achievement levels thus letting the data guide future instructional decisions to improve student progress.

The South Carolina State Department of Education will make decisions about best practices and policies driven by scientifically-based research and develop an accountability system that develops reliable quality control over instructional methods, curricula, and assessments used in delivering services to students. Districts and service providers will be required to demonstrate that the instructional interventions they propose are grounded in research that is objective, valid and statistically significant.

The South Carolina State Department of Education will develop guidelines for integrating technology into the State curriculum standards with specific examples including teacher activities, lesson plans and resources provided on the South Carolina: Teaching Learning Connecting Web site.

The South Carolina State Department of Education will encourage parental and community involvement by providing the tools, resources, and training necessary to help these groups support student achievement and essential learning outcomes.

The South Carolina State Department of Education will promote the formation of active school partnerships with other schools, districts, businesses and institutions of higher learning. These partnerships will help schools link families with local services, and provide students with mentors, tutors, and role models. They will also provide adult basic technology literacy, teacher professional development through innovative delivery methods, and fund raising to increase the resources available to local schools.

To maximize learning return on technology investment, the Office of Technology, in collaboration with the Office of Career and Technology Education, will develop consistent student standards for technology that should be mastered in each grade level from kindergarten to grade twelve. This will enable students to have the same technology literacy as their peers regardless of the school they attend. These standards will be closely aligned with the

International Society for Technology in Education student technology standards.

The South Carolina State Department of Education will ensure equity of access by targeting funding to districts in need of technology. Information concerning district status will be acquired from the State's online technology needs survey.

#### II. Technical and Professional Development Assistance

South Carolina has thirteen Regional Technology Centers strategically located across the state that house technology specialists who provide training to all districts. These staff members keep abreast of the current research and best practices in instructional technologies and pedagogical melodologies. The Regional Technology Specialists consistently communicate and perform needs assessments for each district they serve. They design professional development opportunities to meet needs as requested by districts or as they arise. The team is currently developing a catalogue of one-hour recertification courses specifically aimed at teaching educators to effectively integrate technology into all curriculum areas to help students master the South Carolina State academic standards. Courses are also being targeted for school administrators to facilitate strong school technology leadership. These courses are monitored by end-ofcourse evaluations and follow-up visits to schools to ensure implementation of acquired skills.

Professional development is also provided to the districts using K–12 Partnership professional development funds. These funds are awarded to all districts based on their average daily membership counts. The K–12 Partnership is a unique public-private partnership of the State Department of Education, South Carolina Educational Television, the State Budget and Control Board, the State Library and the State's private sector telecommunications providers. The Partnership's major objective is to infuse technology into the schools by providing resources for using technology as a tool to promote learning in South Carolina. The use of this money is monitored by an online professional development tracking system developed by the State Department of Education.

District professional development is encouraged through the implementation of the South Carolina Teacher Technology Proficiency Proviso. The proviso requires districts to set technology competencies for teachers which must be met during each

recertification period. An assurance form stating that the teachers have satisfied the technology proficiency requirement must be submitted to the State Department of Education each year. The State Department will encourage support for high-quality professional development based on the International Society for Technology in Education (ISTE) standards for teachers and administrators. The Office of Technology plans to form technical assistance teams to visit high-need, low-performing local education agencies to observe operations, interview teachers, and review relevant documents such as the local technology plans. Assistance needed by the districts will be assessed by using a technology needs rubric, and action steps will be recommended to assure these districts meet the State's performance goals and objectives.

Literature and documentation regarding effective instructional programs and best practices based on scientific research will be compiled and distributed to districts at state technology conferences such as SC EdTech, meetings of district technology coordinators, and via our South Carolina Technology News E-Zine. We will also provide examples of best practices and a listing of relevant Web links on our State Web site. The URL for the State Web site is <www.myscschools.com>. South Carolina educators will benefit greatly from the knowledge networking system that will be created in the form of list-servs, chat forums and message boards. This will enable districts to learn of others' successes and failures with attempted innovations. To expand the use of best practices in our state, we will develop a learning community of educators, researchers and policy makers. These groups will be encouraged to engage in virtual communications facilitated by the State Department of Education to enable continuous growth as well as reflective, informative and timely dialogue among districts

### III. Encouraging Collaborations and Partnerships

The Office of Technology will compile a database of institutions willing to partner with high-need school districts by creating a message board on our Web site where potential partners can communicate and generate ideas. Using the Web as a communication mechanism among partners will facilitate the forming of consortiums among local education agencies, business, industry, public entities, private organizations, museums, libraries, colleges, and private schools. A list of initiatives will also be provided via the Web describing previous collaborative partnerships that were successful.

Partnerships are ongoing with the State Department, local districts and colleges that provide professional development courses for teachers. A listing of the professional development opportunities available across the state will be listed on the South Carolina: Teaching, Learning, Connecting Web site <www.sctlc.com> under the Training tab.

The State Department will also encourage high-need districts to partner with research institutions to help in developing accountability and evaluation methods that are valid, reliable and scientifically based. Additionally, recommendations will be made for districts to partner with private and public industries to promote parental involvement and school-to-work experiences for students.

## IV. Promoting Parental Involvement in Schools

The State will continue to encourage and search for programs to provide technology training for parents. Currently, through our Family Learning Centers Project, training, computers and Internet access are provided to families of students in the seven most impoverished and rural school districts of South Carolina. Projects such as this will be researched by the State Department of Education to allow maximum involvement of parents in the learning process by allowing them to take courses after work hours in the district school facilities.

The Office of Technology will make strategies for increased parental involvement a necessary component of local technology plans. Written family and school policies will establish the expectation and authority for school leaders to address family involvement. Local districts will be required to develop clear lines of communication to build relationships between schools and families. Genuine home-school collaboration will be encouraged via electronic communications, providing local Web site information and providing facilities where disadvantaged families can utilize the technology necessary to engage in virtual communities.

As part of local technology plans, districts will be required to reflect efforts to provide a parent-friendly school climate that enables family members to collaborate on technology initiatives. Schools should develop open and ongoing communications with parents about technology planning and provide opportunities for parents to collaborate and help solve problems related to technology use. Schools will be prompted to tap parents' technology knowledge and expertise by inviting them to be advisors and resource providers on

local technology plan implementation teams. Schools will be asked to request and support parental volunteers in technology resource centers, computer learning labs and in the classroom.

South Carolina school districts will be encouraged to make portable laptops available through organizations such as the Family Resource Centers. They will be asked to negotiate with business partners to offer low-cost computer purchases for interested families within the school community. They will be prompted to provide necessary information such as how to obtain email, Internet, or Web TV accounts to help the school expand children's social context for learning and access to electronic information and online learning communities. Districts will be asked to heavily publicize parental technology training opportunities and technology days sponsored by the schools to encourage the use of telecommunications to enhance parent-teacher interactions.

# V. Evaluation and Accountability

A technical assistance team will be assigned by the Office of Technology to visit targeted districts and schools. The team will assess progress by observing classes, interviewing personnel, and examining technology documents and data. If deemed necessary, the team will devise an action plan, including intervention measures, to ensure the district meets State performance goals and objectives. Frequent follow-ups and reports documenting progress will be required.

Districts will be encouraged to develop technology evaluation instruments such as needs assessments and technology evaluation rubrics to collect valid data and document progress. Districts will be required to report results to the State Department on a regular basis to determine which schools have an immediate need for a technical assistance team visit. Schools will be encouraged to use relevant needs assessments to set priorities, benchmarks and determine action steps for technology implementation. They will be required to monitor benchmarks and adjust them as required to meet State performance targets.

Districts will be required to report professional development initiatives through the State Department's online professional development tracking system. They will also report technology needs through the online technology needs survey. This data will be used to monitor technology implementation in each district and to take proactive steps

at the State level to ensure targeted funding for equity of access to technology.

The Office of Technology is also in the process of creating an Education Data Warehouse that will improve decision-making for education in South Carolina by allowing users to cross-reference and compare reports using integrated analysis.

#### VI. Equity of Access

The State Department of Education will use technology funds to close the digital divide among districts in South Carolina. Key aspects of learning technology will be tracked and reported to access which student populations are affected and how. The data collected will be used to refocus priorities and resources in order to serve the local education agencies with the highest need for technology resources and training.

The State Department of Education will provide resources and infrastructure for the use of innovative delivery technologies such as distance learning, two-way video, and online course delivery. This will allow students across South Carolina access to rigorous courses and subject matter experts regardless of geographic location or lack of certified staff.

The State Department of Education will use its online technology needs survey and the Title I allocation formula to target technology funding to the districts with the highest need. Regional Technology Specialists will concentrate on these schools by offering technical assistance and professional development. Technology Assistance Teams will ensure that every district in the State is provided with access to technology tools, online services, multimedia resources and sources of data to achieve the State's academic standards, goals and objectives.

Each local technology plan submitted for approval by the State Department will be required to produce a Technology Resource Usage Policy that addresses equitable scheduling and access to technology resources.

The State Department of Education will encourage districts to ensure that all teachers, administrators, support staff, and parents have adequate hands-on technology time for meaningful development of technology literacy skills. Teachers, administrators, support staff, and parents in South Carolina will have access to up-to-date multimedia resources, telecommunications networks, and online records to support effective educational practices through resources and services provided by the State Department of Education.

Local districts will be encouraged through Ed Tech grant and technology plan requirements to develop a systemic plan for establishing school and community networks and for developing extended partnerships with community centers, museums, libraries, and businesses.

South Carolina's K-12 Public-Private Partnership will provide access to the South Carolina Information Network for all K-12 public schools and libraries affording new learning opportunities for the State's students and citizens.